



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

February 8, 2006

Ms. Janice Bell  
National Environmental Policy Act Document Manager  
U.S. Department of Energy  
National Energy Technology Laboratory  
626 Cochrans Mill Road  
P.O. Box 10940  
Pittsburgh, PA 15236-0940

**RE: Draft Environmental Impact Statement (DEIS) for the Gilberton Coal-to-Clean Fuels and Power Project. CEQ # 20050511**

Dear Ms. Bell;

In accordance with the National Policy Act (NEPA) and Section 309 of the Clean Air Act, the Environmental Protection Agency (EPA) has reviewed the draft Environmental Impact Statement (DEIS) for the above referenced project. The DEIS was prepared to meet the requirements of NEPA and assesses the potential environmental impacts that would result from a proposed Department of Energy (DOE) action to provide cost-shared funding for the construction and operation of a facility near Gilberton Pennsylvania. The facility would produce electricity, steam and liquid fuels from anthracite coal waste (culm). The project was selected by DOE under the Clean Coal Power Initiative to demonstrate the integration of coal waste gasification and Fischer-Tropsch synthesis of liquid hydrocarbon fuels at a commercial scale.

This project has the potential to result in a significant overall benefit for the environment by advancing clean reliable electricity by converting waste coal into a useable energy and to reduce our dependency on foreign energy sources. EPA encourages these demonstration projects with the hope that they will provide innovative solutions for the country's energy demands and we commend the Lead Agency and the applicant for pursuing this technology. We look forward to working closely with the applicant and the Lead Agency in addressing our concerns as noted below.

The EPA has rated this alternative as Environmental Concerns and Insufficient information (EC-2) as described in our guidelines that can be found at: <http://www.epa.gov/compliance/nepa/comments/ratings.html>. Please refer to the detailed comments that are attached for further explanation of our concerns. Thank you for the opportunity to comment on this DEIS. Please contact Jamie Davis at (215) 814-5569 if you have any questions regarding our comments.

Sincerely,

A handwritten signature in black ink, which appears to read "William Arguto", is positioned above the printed name.

William Arguto  
NEPA Team Leader

EPA Supporting Detailed Comments  
**Gilberton Coal-to-Clean Fuels and Power Project. CEQ # 20050511**

Alternatives

EPA realizes that the purpose of this project is for the Department of Energy (DOE) to fund a demonstration project. And that this limited involvement constrains the range of alternative that the EIS considered (page 1-3 and 2-18). However, the document states on page xviii; “Other alternatives to the proposed action have been examined and found to not be reasonable alternatives to NEPA.” The document should at least briefly outline these alternatives and their reasons for not being considered further.

Traffic

The DEIS states that WMPI is committed to “contacting” PennDot to improve roadways in the area to handle the increased traffic volume both during construction and after (page 4-27.) This is an issue that needs to be addressed before construction should begin. What efforts have been made in reaching a commitment from PennDot for road improvements? What is their timeline for the improvements?

Operation/Lifespan

The DEIS states on page xviii that; “Demonstration (including performance testing and monitoring) would be conducted over a three year period. If the demonstration is successful, commercial operation would follow immediately.” What if the demonstration is not successful? What additional steps might need to occur to bring success?

If this facility is demonstrated to be successful how will that effect the operation of the other Gilberton facility overtime?

Additionally, the document states that the designed lifespan of this facility is 26 years. How does this compare to the lifespan of other power plants? What is the general lifespan of a power plant? What are the plans for this facility after the 26 year?

Environmental Justice

The main concern identified in this document is related to the cumulative impacts of the various emissions associated with this facility. There seems to be some uncertainty surrounding the amounts and types of emissions that will be associated with the facility processes as well as emissions from other nearby power utilities. For example, there is considerable uncertainty related to the amounts of ozone that will be generated as a result of the operation. Since the nearest ozone monitors are 35 miles away, existing ozone concentrations in the area are uncertain, and the magnitude of the degradation to ozone can not be quantified. This is a significant gap in our understanding of the potential adverse effects that could reasonably be associated with the operation. The lack of this information could lead to an underestimation of the risk associated with the production of ozone. There needs to be additional investigation and assessment activities conducted in order to assure that the emissions and by products will not pose a significant threat. Additionally, since there are a variety of chemicals associated with the operation of this facility, the cumulative effects of those substances upon human receptors should be taken into account. There is the potential for human receptors to be exposed to multiple chemicals as a result of this operation, and those potential risks should be examined carefully. Since there are multiple chemicals and multiple sources of exposure, the question of cumulative

risk is appropriate for consideration. Are there areas where these chemicals may occur at levels that would pose a threat to human health?

The question of fugitive dusts associated with construction activities may need further investigation. There is reason for concern in light of the significant increase in truck traffic and other dust generating activities that are associated with construction. There needs to be further study as to the potential for exposure of human receptors to fugitive dusts during construction.

The document needs to focus more attention on the potential for impacts to occur in specific locations around the study area that may magnify impacts in a given locality. For example, does modeling tell us where particulate from the stacks will fall? Will it fall in a community near the site or in some area more distant from the operation?

Greater emphasis needs to be placed on the public outreach and community involvement efforts associated with informing the public about the project. There needs to be more detail as to the specific efforts to engage and involve the at-risk populations in the vicinity of this operation.

In light of the public health data that has been presented, it is imperative that all steps are taken to insure the protection of this population from potentially harmful emissions and exposures that may cause undue risk. These data show public health outcomes in Schuylkill County that exceed state-wide benchmarks. This data is indicative of the health trends in the area, and may be an indicator pointing to other sensitivities and/or vulnerabilities.

Additional maps and information characterizing the various communities around the site would be helpful. There is a need for the reviewer to have a more comprehensive view of the study area, and the communities that may be impacted by this operation. It would also help to provide greater perspective as to the localization and nature of potential adverse impacts.

### General Comments

The proposed project has implied that approximately 1000 acres of land would be reclaimed after culm removal. A description of the proposed reclamation process should be included in the EIS.

Portions of the Mahanoy Creek have been altered due to past mining and culm pile storage practices. It is suggested that creek be restored to a natural condition as part of the land reclamation process.

The proposed Clean Coal Power Initiative (CCPI) project would use a Claus Sulfur Recovery unit as part of its H<sub>2</sub>S emission controls. As means to improve reliability of the recovery unit, it is suggested that the Claus unit be designed as a dual train system.

The construction of the CCPI project would require a NPDES permit for the land disturbance activities

The DEIS should investigate the impact of a reduction in flow due to increased water consumption from the CCPI and what impact it would have on the Mahanoy Creek Total Daily Maximum Load analysis.

The DEIS air emission estimates should be consistent with the estimates included with Pre-construction permit (March 2005) submitted to Pennsylvania Department of Environmental Protection under the New Source Review.

Process wastewater/stormwater discharge to the tailing pond should be covered by an NPDES permit due to the direct hydrologic link to the Gilberton Mine Pool pumping station.